

means, said bearing means comprising a fluid bearing formed between said shaft and said hub;

a magnet is disposed on an inner peripheral surface of said downwardly depending flange to face with said stator; and

an outer diameter of said outer shoulder being larger than an outer diameter of said inner shoulder, an inner diameter of said magnet being larger than both outer diameter of said inner and outer shoulders.

6. (Amended) A spindle motor for driving a magnetic disk according to claim 4, wherein said fluid bearing is a dynamic pressure fluid bearing.

7. (Amended) A spindle motor for driving a magnetic disk according to claim 4, wherein an oil is provided between said rotor and said shaft.

8. (Amended) A spindle motor for driving a magnetic disk according to claim 4, wherein said spindle motor is for a hard disk drive.

REMARKS

Claims 4 and 6-8 are pending. By this Amendment, Fig. 1 is corrected by the attached Request for Approval of Drawing Correction, claim 5 is canceled without prejudice or disclaimer, and the specification and claims 4 and 6-8 are amended. Reconsideration based on the above amendments and following remarks is respectfully requested.

The attached Appendix includes marked-up copies of each rewritten paragraph (37 C.F.R. §1.121(b)(1)(iii)) and claims (37 C.F.R. §1.121(c)(1)(ii)).

Entry of the amendments is proper under 37 CFR §1.116 since the amendments: (a) place the application in condition for allowance (for the reasons discussed herein); (b) do not raise any new issue requiring further search and/or consideration (since the amendments amplify issues previously discussed throughout prosecution); (c) satisfy a requirement of form asserted in the previous Office Action; (d) do not present any additional claims without

canceling a corresponding number of finally rejected claims; and (e) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

I. The Specification and Drawings Satisfy All Formal Requirements

The Office Action objects to the specification because of informalities. The specification is amended in order to obviate this objection. Figure 1 is corrected to make it consistent with the amended specification. Withdrawal of the objection to the specification is respectfully requested.

II. Claims 4 and 6-8 Satisfy Formal Requirements and the Requirements of 35 U.S.C. §112, Second Paragraph

In paragraphs 2 and 3, on page 2 of the Office Action, claim 4 is objected to and claims 4-8 are rejected under 35 U.S.C. §112, second paragraph. Claims 4 and 6-8 have been amended to obviate these objections and rejections.

Withdrawal of the objection and rejections under 35 U.S.C. §112, second paragraph, is respectfully requested.

III. The Claims Define Allowable Subject Matter

The Office Action rejects claims 4 and 6-8 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,397,971 to McAllister et al. (hereinafter "McAllister") in view of U.S. Patent No. 5,715,116 to Moritan et al. (hereinafter "Moritan"); and rejects claims 4-8 as unpatentable over McAllister in view of U.S. Patent 5,793,135 to Suzuki et al. (hereinafter "Suzuki"). The rejections are respectfully traversed.

The Office Action asserts that McAllister discloses a spindle motor that includes a hub having a downwardly depending flange at an outer periphery thereof and an inner shoulder and an outer shoulder, as shown in Fig. 4. The hub in McAllister is journalled on a base by an axially spaced bearing pair.

However, McAllister not only does not disclose a fluid bearing as admitted in the Office Action, McAllister fails to disclose a boss portion formed integrally with a base member and a shaft fitted on the boss portion, as claimed by the invention.

Therefore, McAllister does not disclose a spindle motor of the present invention as claimed in claims 4 and 6-8.

Further, the Office Action asserts that Moritan discloses a dynamic pressure fluid bearing for use in a spindle motor. However, Moritan does not disclose a spindle motor that includes a hub having an inner shoulder and an outer shoulder, and a boss portion formed integrally with a base member and a shaft fitted on the boss portion. Thus, Moritan does not disclose a spindle motor as claimed in claim 4.

Thus, even combining Moritan with McAllister, one would not obtain the invention as claimed in claims 4 and 6-8 as neither reference discusses the step shaped hub, nor the relationship between the boss portion, the base member and the shaft.


The Office Action asserts that Suzuki discloses a flat type brushless motor for a floppy disk drive. Specifically, the Office Action asserts that Suzuki teaches a dynamic fluid pressure bearing for a disk drive motor including a boss (support shaft) integral with the rotor base.

However, Suzuki does not disclose a dynamic pressure fluid bearing provided between a rotor and a shaft, as claimed in claim 4. The Office Action asserts that Suzuki teaches a boss (support shaft) integral with the motor base. However, Suzuki discloses the support shaft fixed with a housing as shown in figures. Therefore, Suzuki does not disclose a boss portion formed integrally with a base member, as claimed in claim 4. As discussed above, Suzuki does not disclose or teach a spindle motor of the present invention, as claimed in claim 4.

In view of the foregoing amendments and remarks, Applicant submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 4 and 6-8 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

George P. Simion
Registration No. 47,089

JAO:GPS/rrs

Attachments:

Appendix
Request for Approval of Drawing Corrections

Date: February 7, 2002

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

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